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People like to know, also, where the wind comes from, as that enables them to judge what kind of weather may be expected. If it be from the north, "the north wind doth blow, & we shall have snow;" if it blow from the west, a west wind, we expect rain.

You may get very ready in noticing the direction of places by a little interesting practice. Notice how each of the windows of your school room face; each of the rooms of your home; the rows of houses you pass in your walks: which are the north, south, east & west sides of churches. The direction of places, the way buildings look & the way the wind blows, are among the things intelligent people like to know.

Questions on Lesson VIII.

1. Where does the sun rise?
In the east.
2. Where does he set?
In the west.
3. If you stand with your right hand to the east, in which direction are you looking?
Toward the north.
4. Where is the south?
Opposite to the north.
5. How may you find what direction you are moving in at noon?
At noon, the shadows of objects fall to the north.
6. How may the other points be known?
If we stand, as before, facing the north,

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to look upon. Though it is almost destitute of
trees. When quarries scar the sides of the cliff
& it is scored by straight lines of collages the
exact hues of the yawning quarry ~~formations~~
^{below them.} ~~They seem to have been dug by~~, you get
one of the raw cold effects proper to the
Yorkshire moors.

This "Metropolis of Woollen" abuts on the
coal-field which stretches from Leeds to Nottingham.
many labourers are employed in the coal-pits, in
extensive iron-works. & in the numerous
quarries which surround the town, but the
28,000, or $\frac{1}{4}$, operative engaged in the
140 Woollen Factories of the Borough form
the main body of the working population.

There are aye, wool-sorters, & the operatives,
women & girls for the most part, who attend
to the combing, carding, drawing, roving,
spinning, & weaving machines; besides
packers, over-toters & clerks.

Before investigating the nature of these
several callings, let us consider upon what
qualities in the wool itself its value to the
Manufactures depends. Wool is a sort of hair,
but distinguished from hair strictly so called by
being always more or less wavy or curly; & also
by the fact that each wavy fibre has jagged edges,
being encased in armour of microscopic scales,
the points of which protrude not more than the two
or three-thousandth part of an inch, but are yet
capable of catching in one another. The spiral
nature of the fibres causes them to retain
the twist the yarn receives in the
spinning

to spinning, while at the same time, their 3-
tendency to interlock, secures that each tiny
curving fibre ~~shall not go its own way but~~
shall unite with its fellows to form a yarn. (long
& elastic, though there may be a thousand folds
in the length of an inch. It is, too, to the
presence of these infinitesimal hooks ~~that in the~~
~~surface of the little hair~~ that the process of
felling, or pulling over its value; - the object
being, practically, to beat & spread the
cloth that every fibre in it shall catch hold
of other fibres & thus produce the close, dense
surface which appears in the nap of broad-
cloth.

But in regards to this quality, wools vary
greatly; some have ^{very} coarse hair. like them
there, that is to say, these serrations occur
at longer intervals; & there are distinctions
as combing wools in opposition to the
clothing wools which are finally felted.
In fact, many of the merino wools we
have spoken of are broken off in the
process of combing, enough being left
~~however~~ to unite the countless fibres in a
yarn, firm for the purposes of warp & weft,
however fine it be spun.

Now we have the radical difference between
washed & unwashed; for washed, wool is
combed out - very much on the same
principle as one combs out tangled
hair, & as the more curly the hair the
harder it is to get it out of tangle, so, the
shorter & more spiral the fibre & the more
its surface, the more complicated becomes the
problem of how to comb the wool, & secure its

is to watch the ~~entirely~~ ^{extremely} manifold action
of the machines designed for this purpose. For
wools long in the staple, liberally free from twist, &
hair-like in surface, that is, having few serrations,
& consequently a bright appearance - the processes
of manufacture are comparatively simple.

So important is this difference in the nature
of the wools used in the Clothing & Woollen trades, that
it is only within the last few years the Woollen
Manufacturer has been able to adapt his
machinery to the treatment of short, fine, curly
staples - as, for example, the beautiful Belany
wools, every fibre of which curls like the finest
steel spring & is more delicate & elastic. This
fact accounts for the excessive value attached
in earlier ages to the long-stapled, bright, English
wools, the raw material best known to
Commerce for the manufacture ^{of the} clothing
of the world. According to Matthiessen of
Westminster, all nations of the world were
kept warm by English wool woven in Holland,
without doubt: the duties upon its export formed
the principal source of national revenue under
the Plantagenets: ~~as for the profits of the trade,~~
~~as for the profits of the trade,~~ ^{as for the profits of the trade,} we
read now, in 1357, the royal Wool-Stubler, Edward III,
~~did a treaty with the Count of Flanders, whereby~~
~~in 10000 sacks of wool from his English farmers~~
at the rate of £6 a sack, & selling the whole to
Brabant-merchants at £70 a sack!

But with the advance of mechanical skill
the value of the home-grown staple has declined; &
Woollen Manufactures can now treat the delicate, much-
washed wools ~~produced~~ ^{produced} as efficiently
as the long, bright, English, staple. At the same
time it has become ~~more~~ ^{more} evident that the longer, &
brighter & smoother the staple, the coarser is the

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The wool in fibre; such as fashion demands
worned stuffs, dull looking & soft in texture,
it is other flocks than those of Britain which
quilt the new material.

British wools, however, vary greatly in
quality, & may be roughly classed into those
of long & short-staple, used, respectively in
the Worsted & Woollen Manufactures. The
Lincolnshire, Leicestershire, & Cotswold
Highland sheep are distinguished for their
long wool while the Welsh & South Down
breeds afford short-staple wools for the
Clothes.

The Report of the International Exhibition of
1862 describes Lincoln wool as, coarse, of great
length, & silky in appearance; Leicester, as
~~coarse~~ finer in fibre, but less soft & silky;
Cotswold is inferior to Leicester, while Highland
wool is long & coarse & suitable only for the
manufacture of rough woollen goods. The
Welsh wool is hair-like in structure, &
deficient in spiral twist.

Amongst imported wools, Foreign & Colonial
those of Australia rank first both as to
quality & quantity: our import of these is
enormous, being in excess of the quantity
imported from all other sources what-

merino
 The German wool is yet finer than that of Australia,
 is imported to be made up into shawls, & the
 most delicate fabrics. The question occurs, ^{new} should not this valuable ^{merino} breed be cultivated
 in Britain, seeing that it thrives in somewhat
 similar climates? Much attention has been
 given to this point from time to time, &
 contemporaneously with its introduction
 into Saxony, 'Farmer George' made careful
 experiments with the merino sheep in
 England, producing fleeces from which
 the finest yarns were spun. But the truth
 is, this sheep is of a lean kind, yielding
 poor mutton. The British farmer cannot
 afford to keep a flock for the sake of its fleeces alone.
 Its hair is the long, lustrous, pure white

hair of the Angora goat, has been used a
 good deal of late in the manufacture of
 certain dress-stuffs, in trimming shawls,
~~on the borders~~ & the breeding of this goat, once
 confined to Asia Minor has become an important
 industry at the Cape. But of far greater
 importance to the manufacturer is the wool
 of the elegant Alpaca, a native of the Andes,
 which is brought to England in small bales
 called ballots.

This is the queer-looking South American stuff,
 the story of which Dickens tells so amusingly.
 How certain bales of it lay as lumber in
 the yard of the Liverpool merchant to whom it
 had been consigned, how ^{chance} ~~fortune~~ brought thither
 a young Yorkshire manufacturer, how he pulled
 out a handful from the open corner of a bale
 felt at it, smelt at it, did all but taste it,
 finally, carried away a sample in